



## **Arlington Zoning Board of Appeals**

**Date:** Thursday, March 23, 2023  
**Time:** 7:30 PM  
**Location:** Conducted by remote participation  
**Additional Details:**

### **Agenda Items**

#### **Administrative Items**

##### **1. Remote Participation Details**

You are invited to a Zoom meeting.

When: Feb 28, 2023 07:30 PM Eastern Time (US and Canada)

Register in advance for this meeting:

[https://town-arlington-ma-](https://town-arlington-ma-us.zoom.us/join)

[us.zoom.us/meeting/register/tZclcuivqjsvEtL2v5YI0eDS9o\\_LVRPpJJBo](https://town-arlington-ma-us.zoom.us/meeting/register/tZclcuivqjsvEtL2v5YI0eDS9o_LVRPpJJBo)

After registering, you will receive a confirmation email containing information about joining the meeting.

In accordance with the Governor's Order Suspending Certain Provisions of the Open Meeting Law, G. L. c. 30A, § 20 relating to the COVID-19 emergency, the Arlington Zoning Board of Appeals meetings shall be physically closed to the public to avoid group congregation until further notice. The meeting shall instead be held virtually using Zoom.

Please read Governor Baker's Executive Order Suspending Certain Provision of Open Meeting Law for more information regarding virtual public hearings and meetings: <https://www.mass.gov/doc/open-meeting-law-order-march-12-2020/download>

#### **Hearings**

##### **2. Docket # 3719: 1021-1025 Massachusetts Avenue**

#### **Meeting Adjourn**



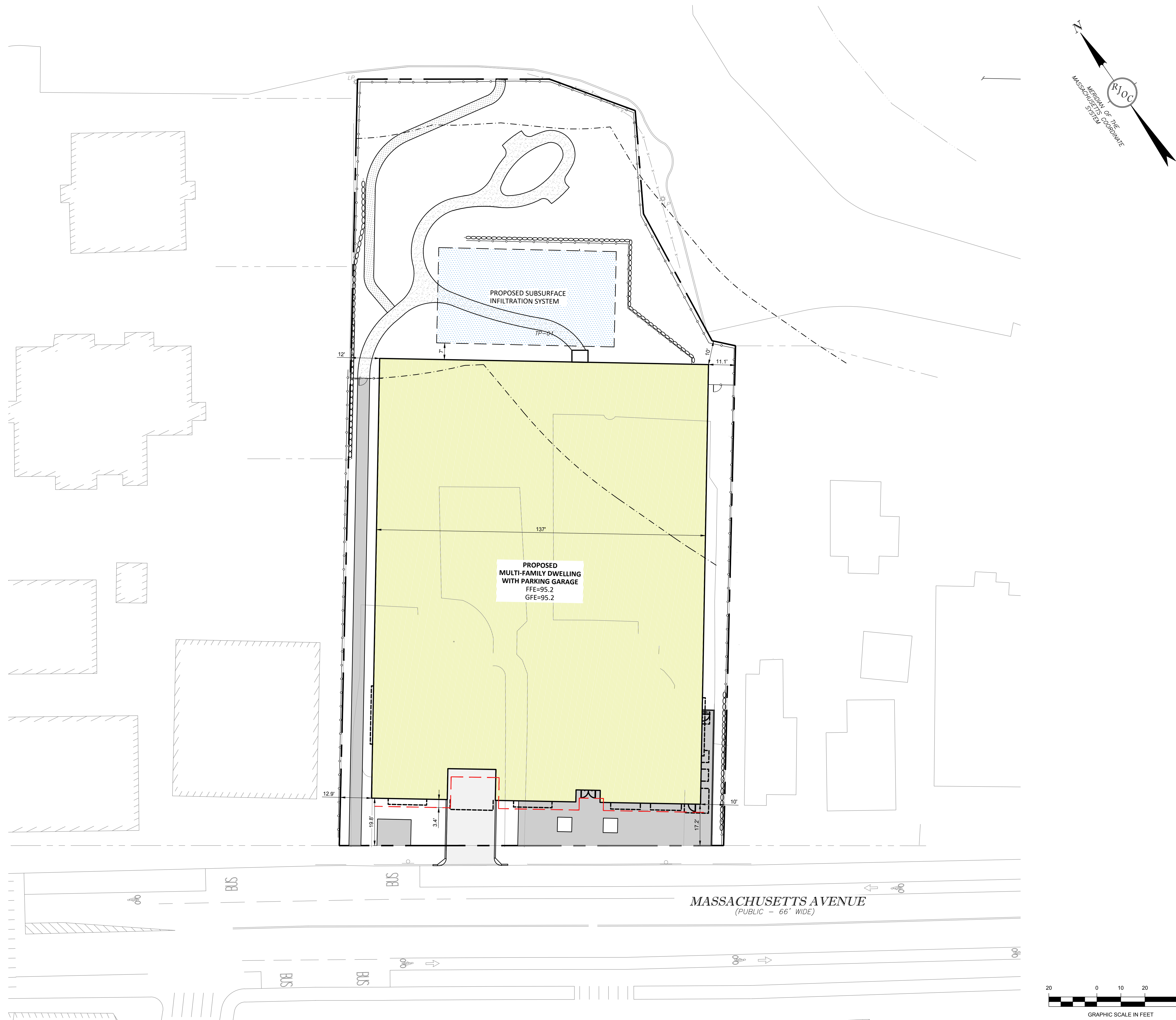
## Town of Arlington, Massachusetts


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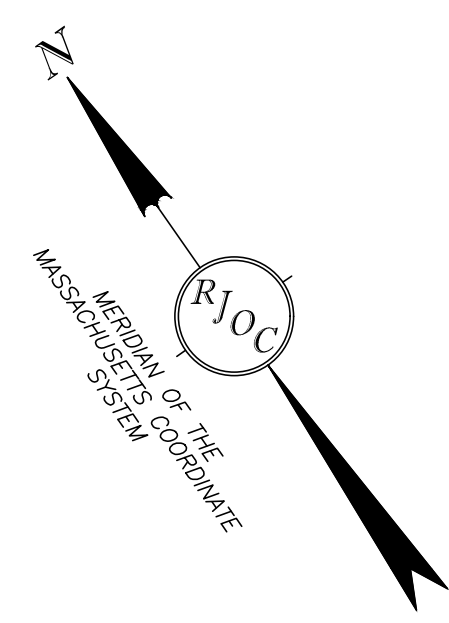
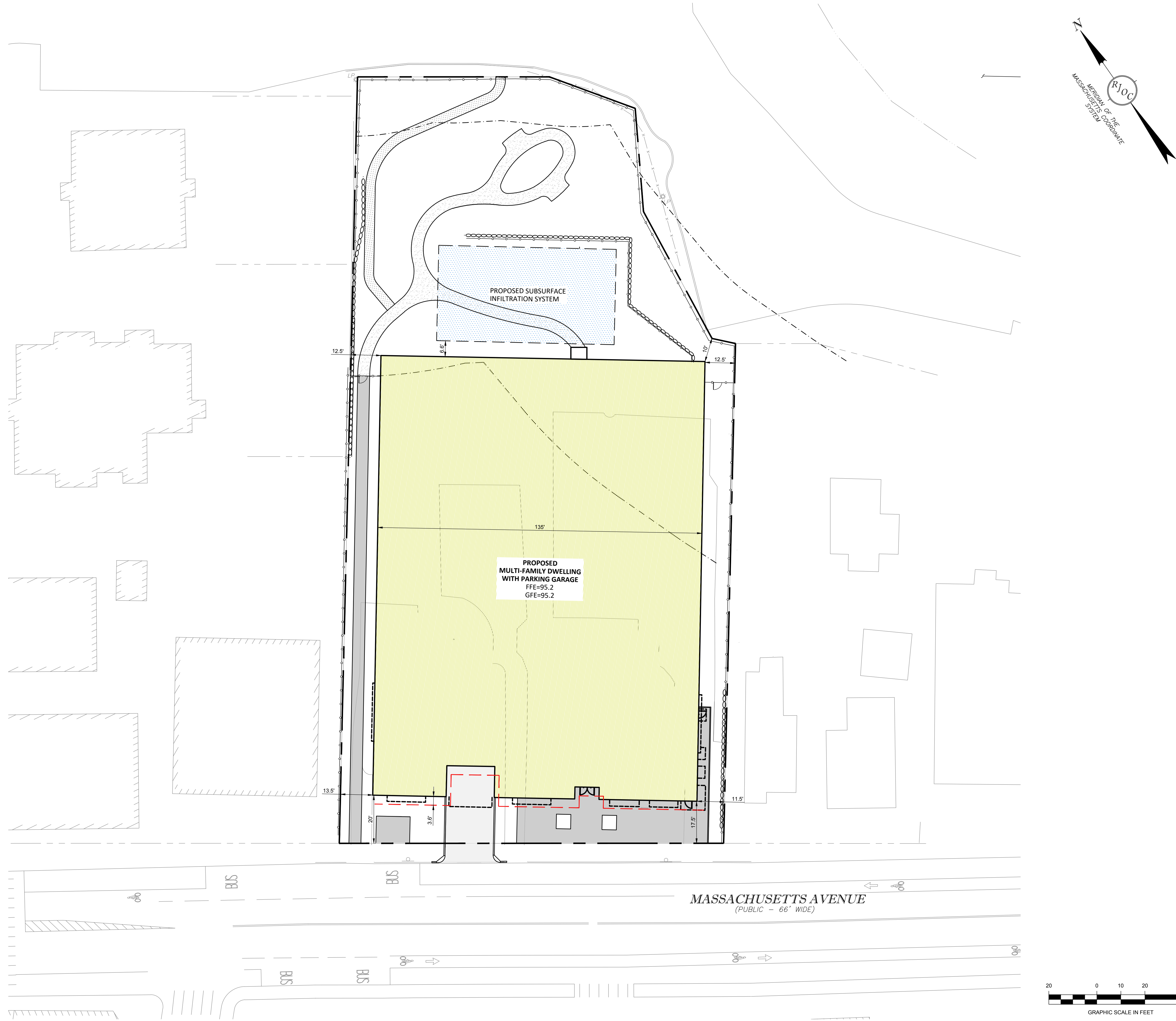
**Docket # 3719: 1021-1025 Massachusetts Avenue**

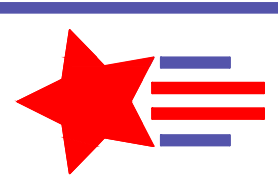
**ATTACHMENTS:**

Type	File Name	Description
▢ Reference Material	21583_CP-1_Conceptual_Plan.pdf	21583_CP-1 Conceptual Plan
▢ Reference Material	21583_CP-2_Conceptual_Plan.pdf	21583_CP-2 Conceptual Plan
▢ Reference Material	1025_Mass_Ave-Letter2_(2023-02-17).pdf	1025 Mass Ave-Letter2 (2023-02-17)
▢ Reference Material	1021-1025_Mass_AveSustainability.FINAL_23.02.23.pdf	1021-1025 Mass AveSustainability.FINAL_23.02.23



SHEET CP-1	CONCEPTUAL SITE PLAN  LOCATED IN  ARLINGTON, MA (MIDDLESEX COUNTY)  PREPARED FOR  MAJ INVESTMENT, LLC		<b>PATRIOT Engineering</b> 35 BEDFORD STREET, SUITE 4 LEXINGTON, MASSACHUSETTS 02420 T: (978) 726-2654 <a href="http://www.patriot-eng.com">www.patriot-eng.com</a>		REVISIONS			1021 & 1025 MASSACHUSETTS AVENUE  ARLINGTON, MASSACHUSETTS	DRAWN BY: DATE: 02-02-2023  CHECKED BY: PROJECT No: 21-32
					DATE	BY	DESCRIPTION		



CONCEPTUAL SITE PLAN LOCATED IN <b>ARLINGTON, MA</b> (MIDDLESEX COUNTY) PREPARED FOR <b>MAJ INVESTMENT, LLC</b>	 <b>PATRIOT Engineering</b> 35 BEDFORD STREET, SUITE 4 LEXINGTON, MASSACHUSETTS 02420 T: (978) 726-2654 www.patriot-eng.com		REVISIONS	
			DATE	DESCRIPTION
SHEET <b>CP-2</b>	1021 & 1025 MASSACHUSETTS AVENUE ARLINGTON, MASSACHUSETTS		DRAWN BY:	DATE: 02-02-2023
			CHECKED BY:	PROJECT No: 21-32



February 17, 2023

Mr. Christian Klein, Chairperson  
Arlington Zoning Board of Appeals  
23 Maple Street  
Arlington, MA 02476

**Re: Tetra Tech Comment Letter 2**  
Comprehensive Permit (40B) Peer Review  
1021-1025 Mass Ave  
Arlington, Massachusetts

Dear Mr. Chairman:

The Applicant has provided revised submission materials addressing comments in our January 6, 2023 letter. This letter provides an update to those comments based on review of the Applicant's response dated January 23, 2023 and corresponding submittals including:

- A "Response to Architectural Peer Review" letter dated January 20, 2023, prepared by Harrison Mulhern Architects (HM).
- A letter dated January 23, 2023, prepared by Patriot Engineering (Patriot) responding to Tetra Tech Letter 1 comments.
- Stormwater Analysis and Calculations for 1021 & 1025 Massachusetts Avenue" dated September 9, 2022, revised January 20, 2023 (Rev 1) by Patriot.
- A plan set titled "Comprehensive Permit Plan Set" for 1021 & 1025 Massachusetts Avenue (Site Plans), dated September 19, 2022, revised January 23, 2023, prepared by Patriot.
- A "Response to Comments" letter dated January 23, 2023, prepared by LEC Environmental Consultants., Inc. (LEC).
- A "Response to Peer Review" letter dated January 23, 2023, prepared Kyle Zick Landscape Architects, Inc. (KZLA).
- A revised set of landscape plans (Sheets L1-L6) for 1021-1025 Massachusetts Avenue, Arlington MA dated September 8, 2022, revised January 20, 2023 (Rev 1) prepared by KZLA and referred to as "Recreation and Open Space Amenities".
- A "Response to Transportation Peer Review" memorandum dated January 23, 2023, prepared by Vanasse Associates Inc. (VAI). Please note, the memo available on the ZBA website does not include referenced attachments.
- Photometric Plans by Visual dated September 13, 2022, and January 23, 2023, respectively.
- A single sheet referenced as "Draft Construction and Traffic Management Plan" identified by drawing title "Utility Plan Sheet 5 of 7" dated September 19, 2022, understood to have been prepared by Maggiore.

The Revised Plans and supporting information were very responsive to our prior comments and address most of our concerns.

The following updates status of our previously identified substantive concerns.

- **Constructability** – Based on the presentation provided by the applicant, the proposed construction methodology is better understood. However, the methodology described relies heavily on use of the public way to support construction and the management plan provided does not address the range of uses required to support construction and includes potentially unsafe access and egress. It is our understanding the applicant is preparing more developed plans showing how the public way will be used and as such we will reserve comment until those plans are provided for review.
- **Emergency Access** – The Project relies on adjacent private property and the public way for emergency access. However, the applicant has indicated the building geometry and placement will be adjusted to meet setback requirements. As such, access proposed is no less than otherwise required by existing zoning. Additionally, the building will be fully sprinklered providing a higher level of protection than otherwise required by a shorter building. We still recommend the Board confirm acceptability of the proposed access with the Arlington Fire and Police Departments.
- **Stormwater Design Basis** – The stormwater design and analysis has been modified to address our prior concerns. Although there are some minor technical issues with the material submitted the revised documents substantively address our concerns.

While most of our comments have been addressed some remain and status of each is provided below. Text shown in gray represents information taken directly from previous correspondence. Text shown in black is new or updated information. Comments ending with “**Comment Resolved**” have been addressed to our satisfaction and will be removed from future correspondence. Numbering will be maintained so each issue can be tracked to its conclusion.

## Comments

### Preliminary Site Development Plans (Tab 06)

The Site Development Plans were well organized and readable and include most of the information needed to conduct our review. The following are comments on each sheet included in the set.

#### **Cover Sheet**

1. Site Plans typically include a “Layout and Materials Plan” which clearly describes proposed surface treatments and critical dimensions and is usually the plan most referred to during review. It would be helpful to have a similar plan included with the set which ideally also shows the proposed parking layout within the building as well as proposed setbacks and dimensional/lot coverage summaries. One is provided with the landscape plans which could ideally be consolidated with the site development plans into a single coordinated set.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

#### **Existing Conditions Plan**

2. The site includes some special topographic conditions and very close abutters. We recommend the applicant provide contours at 1-foot intervals and that contours extend at least 4 feet past the property line to help understand how grading along the property line will be influenced by the Project.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

3. Please confirm test pit information was provided by a licensed soil evaluator and provide license number if available. Please note, test pit information conflicts with that shown on the Site Demolition Plan

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

4. It would be helpful to include a datum reference comparing the Town of Arlington datum to the vertical datum used on the plan (NAVD88).

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

5. Clearly define the shape and spillover elevation of the existing depressions which currently exist in the wooded area at the rear of the property.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

6. Show structures on abutting properties on all plans.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

7. Include lane markings for Massachusetts Avenue.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

#### **Site Demolition Plan**

8. It appears the Project intends to save trees at the rear of the property. Although certainly commendable it appears several may be negatively impacted by proposed grading or will otherwise limit area likely needed to support construction. We recommend the applicant consider the area needed to support construction and revise the tree removal limits accordingly.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

9. Does the Project anticipate installation of a temporary construction fence? If so, please show its location and gates on the demolition plan along with any proposed gates.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

10. The plan shows a proposed construction entrance pad at the southeast corner of the site. However, the pad appears to extend into the proposed building footprint. Please clarify if this entrance is only to be used during demolition and if so where the entrance will be located during the balance of construction.

2023-02-17 Update – No response provided however comment is addressed in plan revisions. **Comment Resolved**

11. Provide contour labels.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

12. Correct test pit information as needed to address inconsistency with information on the Existing Conditions Plan.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

13. Is the existing fence between the subject property and 1033 Mass Ave proposed to remain or will it be removed? In either case, please note its treatment on the demolition plan

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

14. Please show anticipated sawcut/excavation limits for work within the public right of way. A sawcut line is include landscape plans but does not consider proposed utility connections.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

### Grading and Drainage Plan

15. Proposed grading along the boundary with 1017 Mass. Ave creates a dam condition that channels flow but does not show how the resulting discharge is managed nor demonstrates that the flow interruption will not negatively impact the abutting property. We request the applicant explain how drainage along that boundary will be addressed so as not to negatively impact the abutting property.

2023-02-17 Update – Condition appears to remain despite response indicating it was addressed. Rather than continue this item we recommend any decision approving the Project include a condition requiring the Project to maintain existing drainage patterns at the property boundary so that no runoff is directed to abutting properties or that runoff from abutting properties is not otherwise blocked from following the flow path prior to development of this Project. **Comment Resolved**

16. Similarly, proposed grading along the boundary with 1033 Mass. Ave appears to direct site runoff from the Project toward that property when just the opposite occurs under current conditions. Applicant should address how runoff patterns will be maintained permanently and during construction to prevent negative impacts on abutting properties.

2023-02-17 Update – Condition appears to remain although less prominently. Addressed via condition noted under comment 15. **Comment Resolved**

17. The proposed garage entrance is aligned in a manner that forces vehicles to drive over an existing catchbasin. We recommend either the entrance be shifted slightly, or the catchbasin be relocated to keep it out of the path of vehicles accessing the garage.

2023-02-17 Update – Response indicates catch basin will be relocated. **Comment Resolved**

18. The plan suggests the catchbasin rim may be adjusted to accommodate the driveway but any changes to the catchbasin rim will impact gutter slope and roadway cross-slope of Mass Avenue. The entrance should be designed to maintain the existing grading of Mass Ave or otherwise plans should show the extent of change to Mass Ave.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

19. The proposed infiltration system is almost 10 feet higher than grade. Please describe how the Project intends to address potential hydrostatic loading of the wall by the infiltration system and how weeping through the wall will be avoided.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

20. The infiltration system relies on the soils beneath it to be protected from compaction to maintain its ability to infiltrate water as represented in the design. Given the proposed infiltration system is the only

unoccupied area available for construction staging, please describe how the soils below the system will be protected from compaction during construction.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

21. Please quantify the volume of excavation and disposal required to construct the proposed building foundation and describe how excess material will be managed and removed from the site.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

22. Its unclear how runoff from the site will be discharged onto the abutting property and how that flow will be conveyed across the paved surface to the stream. Please clarify how the discharge will be managed so that flow will be safely and reliably conveyed from the site to the stream. Include any channel or spillway details and threshold elevation on the plan.

2023-02-17 Update – Grading has been modified to match pre-development conditions more closely, however, the requested explanation for how the discharge will be designed or conveyed across the adjacent parking has not been provided. An overflow spillway is shown but it's not clear how it is intended to function. Our principal concern is that runoff must flow across the adjacent parking lot and redevelopment will change those patterns and intensity despite meeting applicable design standards potentially resulting an unsafe condition. Please provide a brief explanation of how the project expects to match current conditions and how it expects to manage flow across the abutting property if at all.

23. Proposed grading appears to exceed maximum allowable slopes for accessible routes. Please clarify which site amenities are accessible and identify any required accessible routes.

2023-02-17 Update – Comment appears to have been addressed as requested except the emergency access path. **Comment Resolved**

### Site Utility Plan

24. This plan is similar if not the same as that included under Tab 11. Recommend it continue to be provided as part of this plan set exclusively to avoid any confusion and reduce document production.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

25. Please provide inverts of the existing sewer and proposed site discharge to confirm required minimum slopes can be met using gravity infrastructure and that main line flow is not impacted by flow from the site due to excessive drops.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

26. Will electric service come from underground lines in the street or from a drop off existing overhead lines?

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

27. Although we expect public water and sewer infrastructure would have adequate capacity to serve the Project, the Project represents an increase in demand on municipal water and sewer infrastructure above the current use and is likely much larger than would have been forecasted during original design of municipal services since it is so much larger than otherwise allowed under zoning. We recommend the applicant provide a simple memorandum or similar documentation by a licensed Massachusetts engineer

demonstrating the Project can be served adequately without impacts to existing or proposed infrastructure or its users. At a minimum the documentation should describe and quantify proposed demand, describe existing infrastructure serving the site, provide calculations demonstrating available capacity/service and describing improvements, if any, needed to town infrastructure to serve the Project. If offsite infrastructure improvements are required to serve the Project, please note them clearly in the memorandum. Documentation is requested as factual basis on which the Board can rely in determining the Project can be safely served by local infrastructure. It is not intended to suggest issues may exist.

2023-02-17 Update – Response does not address the comment. What we request is a document prepared by a qualified individual assessing and documenting that capacity is available in the existing infrastructure. Please provide the information requested ideally as a separate document to avoid overcomplication of site plans and notes. Include in your summary an explanation of why the proposed domestic supply is connected to the high-pressure fire main and not connected to the lower pressure domestic supply. Our experience suggests connecting to a 150-psi supply for domestic use may require pressure reduction.

28. Please describe how/if the Project plans to address Inflow/Infiltration removal requirements for new or expanded sewer connections.

2023-02-17 Update – Applicant requests a waiver from the requirement. We recommend the Board consult with the Town DPW prior to granting such relief. **Comment Resolved**

## Site Details II

29. The details for the underground infiltration system seem to show conflicting information. System section indicates the chambers will be 45" tall but are 57" per elevations provided in the plan view above. Please clarify and confirm the model uses the same dimensions shown on the details.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

30. The sheet includes a detail for a chain link fence and no other fence detail is provided. Is it the intent to install chain link fence at the locations noted on the Grading and Drainage Plan?

2023-02-17 Update – Vinyl fence detail provided indicates the fence will be approximately 8 feet tall (despite 6-foot label on plans) and does not show the bottom gap described by the landscape architect during the public hearing. In our opinion surrounding the site with a continuous solid vinyl fence is a fairly uninspiring solution in an otherwise well-thought and creative landscape and effectively disconnects and isolates the improvements for abutters and wildlife. We recommend the Board ask the applicant to consider alternate proposals that could address their security concerns but without so completely isolating the space. It is also our opinion that isolating almost all on-site riverfront area from the adjacent brook does not comply with performance standards for work within riverfront area.

## Lighting Photometric Plan (Tab 07)

31. The plan indicates several wall packs will be installed along the western building face and appear to spill light onto the abutting property creating a potential adverse impact on the lower-level windows of the abutting property. At a minimum the lighting plan should be modified to eliminate any light spill onto abutting parcels.

2023-02-17 Update – Response indicates the proposed vinyl fence will prevent spill over and revised Photometric plans show no spill over. We recommend the applicant update photometric plans to reflect setback and building geometry changes referenced in the last hearing. **Comment Resolved**

32. Is the intent of these lights to provide a lit path from the street to the rear of the site. If so, please explain how the lights will be controlled and the expected times they will be lit.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

33. The Photometric Plan was difficult to read. Please provide an electronic version that is clearer and with readable light levels.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

34. No lighting is shown for the common courtyard proposed on level 2. Please include on the plan and explain how/if this area will be lit and its anticipated hours of operation.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

#### **Conceptual Architectural Plans (Tab 09)**

The following comments are offered on civil-related items. We defer to the Town's architectural peer reviewer for all other architectural design comments.

35. The parking layout provided does not show the anticipated location of structural columns that have the potential to limit, if not preclude, use of certain spaces. Please indicate where columns are anticipated.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

36. The layout does not include provision for accessible spaces. Please indicate what spaces are intended as accessible and include required loading areas and signage.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

37. Does the Project anticipate providing charging stations for electric vehicles? If so, please note those spaces on the plan so charging station and electric vehicle locations are known in case of fire.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

38. The parking layout does not provide backing space for vehicles parked at the end of aisles. Typically, an area approx. 5' deep is provided so vehicles exiting those end spaces have an area to maneuver when exiting. If no backing area is provided, we recommend those spaces be dedicated for compact vehicles.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

39. The architectural plans do not include reference or any specific accommodation for the "Green Roof" described in the environmental impact analysis and draft wetland application. If a green roof is proposed, it should be shown on the architectural plans.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

40. The parking layout indicates “Hanging Bike Racks” at many of the parking space locations. Please provided dimensions of the proposed parking spaces and describe how/if the hanging bike storage will restrict use of any of the parking space.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

41. The plans do not indicate location of mechanical equipment (air handlers, air conditioners, etc) and no space appears to be allocated or available on the site. Please confirm all exterior mechanical equipment will be located on the roof and show where it will likely be placed.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

42. Provide a description of how excavation for the basement level will be accomplished without impacting adjacent property or the public way.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

#### Utility Plan (Tab 11)

43. This plan is essentially a duplicate of a similar plan included under Tab 06. No additional comments. Suggest this plan be removed as a standalone drawing to avoid confusion with similar plan at Tab 06.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

#### Landscape Plans L1-L7 (Tab 12)

44. Landscape Plans include duplicate or conflicting information with that included in the Preliminary Site Development Plans. We recommend the Landscape Plans be coordinated and included with the Site Plans and any duplicate content be removed.

2023-02-17 Update – No response provided however comment has been addressed in revised submittals. **Comment Resolved**

45. The Plans indicate several trees at the rear of the property will be maintained. Given the lack of available space on site to support construction and the extent of anticipated grading within that area protection of those trees does not appear possible. Please confirm if the project intends to protect those trees and if so, how it plans to accomplish its work with them in place.

2023-02-17 Update – No response provided however comment has been addressed in revised submittals. **Comment Resolved**

46. The Planting Plan indicates several new trees will be planted in the northern portion of the site. Please confirm if the Planting Plan contemplates infilling among the existing trees. If infill, please distinguish between trees designated to remain in place and those intended to be removed. Suggest any trees scheduled to be removed not be shown on the Planting Plan.

2023-02-17 Update – No response provided however comment has been addressed in revised submittals. **Comment Resolved**

47. Grades shown on the walkway appear to exceed the maximum allowed for accessible paths. Please confirm if the outdoor amenity space is intended to be accessible and if so, confirm the grading meets accessible standards.

2023-02-17 Update – No response provided however comment has been addressed in revised submittals. **Comment Resolved**

48. Please indicate which side of the Screen Fence will face the abutter.

2023-02-17 Update – No response provided. We recommend any decision approving the Project include a condition requiring any fence installed along the property boundary be installed so the finished side faces the abutting property unless otherwise specifically requested by the abutter. **Comment Resolved**

### **LEC Impact Analysis of the Natural and Built Environment (Tab 15)**

49. The analysis indicates there are no stormwater measures to attenuate peak flows from the existing site. Although there are no measures that appear to be specifically built with that intention, there appear to be two large natural depressions in the rear of the property that we expect provide substantial peak flow mitigation and infiltration. Additional related comments are included in later section related to stormwater.

2023-02-17 Update – Comment addressed in other responses. **Comment Resolved**

50. The depressions have not been included in the analysis of pre-development conditions and as such any representation that the proposed stormwater design meets performance standards is premature in our opinion. However, we do expect the standards can be met with design changes but recommend those changes be included in any plans approved by the Board.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

51. We agree with methodology used to document the location of Mill Brook and the corresponding Riverfront Area and have no reason to believe an approved delineation would vary significantly from that shown on the plans.

2023-02-17 Update – No response required. **Comment Resolved**

52. We agree that the onsite state-regulated resource areas are limited to Riverfront Area.

2023-02-17 Update – No response required. **Comment Resolved**

### **Stormwater Management Report (Tab 15)**

The analysis underlying the Stormwater Report includes some errors/omission which when addressed are likely to change the results. As such any representation that the Project has met peak rate attenuation requirements is premature. Our specific comments are listed below.

53. The analysis does not consider the existing wooded depressions in its pre-development runoff calculations. The depressions appear to provide significant mitigation of site runoff and excluding them from the analysis may significantly over-estimate pre-development runoff. We recommend the depressions be clearly shown on the existing conditions plans and incorporated into the pre-development runoff model and that post-development mitigation be modified accordingly.

2023-02-17 Update – Analysis has been modified as requested. There are some minor issues with the modeling but nothing that is likely to change the results. **Comment Resolved**

54. Similarly, the model does not include the post-development depression to which the infiltration system discharges nor describes how flow leaves the site. Please update the model to include the proposed depression and its anticipated outlet configuration.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

55. The model should also account for runoff originating off locus such as that flowing through the site from properties east and west.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

56. The stormwater model includes a significant lag between peak runoff from at grade portions of the site and peak runoff from the roof/infiltration system which appears to be a bit counter-intuitive given runoff from the roof would be expected to be much faster than runoff from the site. The lag creates a gap between the two peak discharges resulting in a significant benefit to the Project's post-development peak discharge rate. We request the applicant explain the lag and provide analysis results demonstrating how it was calculated.

2023-02-17 Update – Comment addressed in the revised analysis. **Comment Resolved**

57. The drainage report uses 6-minute time of concentration (Tc) for all model scenarios which doesn't accurately distinguish between runoff patterns. We understand Hydrocad model instructions recommend a 6 min. minimum Tc but would appreciate a justification for Tc used in the analysis.

2023-02-17 Update – Comment addressed in the revised analysis. **Comment Resolved**

58. The model does not include any description or consideration for the specific method of discharge from the site but rather aggregates all flows leaving the site. The work will certainly result in modification of drainage patterns to the adjacent parking lot given the changes to grading and distribution of stormwater along the property boundary. Analysis should include clearly defined outlet conditions showing how flow leaves the site and crosses the abutting property under each storm.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

59. There appears to be no stormwater collection system serving the adjacent parking lot. As such all flow leaving the site will travel across a parking lot potentially creating an unsafe condition. We recommend the applicant clearly describe how flow leaving their site will traverse the neighboring parking lot and confirm the abutter accepts those changes.

2023-02-17 Update – Comment addressed in revised analysis. **Comment Resolved**

60. The analysis does not appear to take credit for any mitigation due to implementation of a green roof as described in the LEC reports/applications. As such, stormwater performance represented in the analysis should not be impacted if the green roof was not constructed. We would still appreciate clarification of the project's intentions and commitment to installing and maintaining a green roof.

2023-02-17 Update – No response provided however based on other responses it appears the only “green roof” element is the planting in the courtyard which is relatively modest and required no special consideration as it relates to stormwater management. **Comment Resolved.**

#### **Transportation Impact Assessment (Tab 16)**

The TIAS has generally been prepared in accordance with industry standards. We agree with the methodology used to estimate traffic volume and its distribution and consider added volume from the Project is relatively small and generally insignificant in comparison to current roadway volumes. The following comments address our non-capacity related issues.

61. Town guidelines recommend traffic studies include intersections within 1,000 feet of the development site. The traffic study did not include all intersections within 1,000 feet. However, additional intersection capacity analyses beyond those evaluated in the traffic study is not warranted since Project traffic is less than 2% of existing volume. Such a nominal increase is not anticipated to materially change peak hour levels of service at intersections not included in the study.

2023-02-17 Update – No response required. **Comment Resolved**

62. The building program shown in the traffic study varies slightly from that shown on architectural plans and site plans. The discrepancies are not considered material but should be addressed in future submittals to the extent possible.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

63. The traffic study indicates that nine surface parking spaces are proposed in the rear of the site. However, the site plan does not show any surface parking on the site. Please confirm proposed parking layout and supply.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

64. The traffic study included a crash analysis of the study intersections. However, crash data for the Massachusetts Avenue/Menotomy Road intersection and the crash rate calculations for all study intersections were not included in the Appendix. Please provide.

2023-02-17 Update – Referenced attachment not provided.

65. No documentation is provided to support the proposed parking space to unit ratio. We recommend the Board request the applicant to provide a simple justification for the ratio proposed.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

66. Based on the site plan, emergency vehicle access will be limited to the front (Massachusetts Avenue) side of the building. Tetra Tech recommends that the Applicant describe anticipated emergency vehicle access at the site and explore the feasibility of expanding emergency vehicle access to the sides and rear of the property. The Applicant should review the site plan with the Arlington Fire Department to ensure accommodations provided are acceptable to the Fire Department.

2023-02-17 Update – Applicant has provided a plan showing staging location for emergency vehicles indicating a reliance on access through abutting parcels over which the Project has no control. As such we recommend any decision approving the Project include a condition requiring the Project to obtain

written approval from the Arlington Fire Chief or his/her designated representative of the proposed building access prior to issuance of a building permit. **Comment Resolved**

67. It's unclear how delivery/trash pickup/moving trucks will be accommodated. We recommend the Board request the applicant describe how these activities will be accommodated and provide AutoTurn analysis, if needed, to confirm services/vehicles can circulate without impeding on-street parking, bicycle lane operations or site access/circulation.

2023-02-17 Update – Response indicates deliveries/trash pickup/move in will be accommodated in the off-street driveway. In our opinion this approach is impractical and potentially dangerous as it requires backing out onto Massachusetts Avenue. We recommend the Applicant consider requesting a portion of the front of the site be designated as a loading zone for the Project and striped and signed accordingly or provide a means of turning a delivery vehicle in the garage.

68. We agree with the TIAS's suggested site access improvements to provide a Stop bar and sign at the site driveway approach to Massachusetts Avenue. Tetra Tech recommends that all proposed traffic signage and pavement markings for the project be MUTCD-compliant.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

69. The traffic study assumed 20% of residents will use non-vehicle modes of travel to/from the site. Based largely on its MBTA access and the bus stop on the north side of Massachusetts Avenue. We recommend the Applicant coordinate with the Town and the MBTA to evaluate the feasibility and appropriateness of providing a bus shelter to encourage transit usage to/from the site.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

70. The Applicant commits to providing bike storage based on the architectural plans. The proposed bike rack locations should be shown on the site plans. Tetra Tech recommends that the Applicant consider providing a mix of indoor, secured long-term bike parking for residents and outdoor, short-term bike parking for guests and retail customers. The bike mitigation should be developed in accordance with the Town's Bicycle Parking Guidelines.

2023-02-17 Update – Comment addressed as requested. We recommend any decision approving the Project include a condition requiring the Project to comply with Town's Bicycle Parking Guidelines. **Comment Resolved**

71. The traffic study indicates that adequate ISD would be provided at the proposed site driveway on Massachusetts Avenue. However, the available ISD would be restricted when taking on-street parking into account. Tetra Tech recommends that the Applicant work with the Town to evaluate the feasibility of providing a painted buffer (on-street parking restriction) between the proposed driveway and the beginning of on-street parking to the south of the driveway to enhance sight lines.

2023-02-17 Update – Comment addressed as requested. See comment 67. **Comment Resolved**

72. As part of the project, a new driveway will be constructed for vehicles entering/exiting the proposed covered parking area. This new driveway will be located within approximately 15 feet of the existing bus lane. The minimum length for an on-street parking space (end space) is 20 feet. Therefore, Tetra Tech recommends the Applicant prepare a restriping plan to extend the end of the bus lane or provide hatched pavement markings to provide a no parking zone between the bus lane and the proposed driveway, subject to Town review and approval. The plan should also show the proposed restriping for the on-street parking to the south of the driveway.

2023-02-17 Update – Response indicates applicant will work with the Town to develop an appropriate solution but has not proposed a plan to remedy. We recommend the Board request the applicant provide a plan showing intended modification or encumbrance of the public way during construction and post development so the Board can understand what is being proposed and can condition an approval accordingly.

73. Approximately 425 feet south of the site, a midblock crossing is provided across Massachusetts Avenue. Tetra Tech recommends that the Applicant assess conditions at this location (i.e., pavement striping, wheelchair ramp design, crosswalk width and pavement markings, traffic control, sight lines, etc.) and determine if any improvements are warranted to enhance safety.

2023-02-17 Update – Comment addressed as requested. Response includes a Project commitment to improve the crossing and we recommend any decision approving the Project include a condition requiring the Project to construct the improvements recommended by VAI prior to issuing a certificate of occupancy. **Comment Resolved**

74. We recommend the Applicant describe anticipated delivery and moving truck operations and confirm that these services/vehicles can be adequately accommodated on-site without impeding site access, circulation and/or parking.

2023-02-17 Update – Response suggests the street will be used for delivery and move ins which conflicts with the response provided to comment 67. This issue will be consolidated with comment 67. **Comment Resolved**

#### LEC Bylaw Notice of Intent Application (Tab 19)

75. The Arlington Conservation Commission maintains its review responsibility under the state wetlands regulations (310 CMR 10) which includes strict performance standards for work within Riverfront Area and compliance with Massachusetts Stormwater Management Standards and Handbook. Given the Commission maintains review responsibility under state regulations we recommend the Applicant request, and the Board consider, waiving filing requirements under the local bylaw to avoid the Board having to conduct a parallel review with the Commission. If the Commission is concerned that waiving the local bylaw removes a needed control, they can request the Board include it as a condition in their decision.

2023-02-17 Update – No response required. **Comment Resolved**

76. The application asserts no work is proposed within an Adjacent Upland Resource Area however it is our understanding the Adjacent Upland Resource Area associated with the Mill Brook Bank would extend into the site (generally coincides with the 0-100' riparian zone) and work is proposed within that area.

2023-02-17 Update – Comment addressed as requested. **Comment Resolved**

77. The proposed construction period stormwater control measures are relatively sparse and include a single line of staked compost filter tube, a single catch basin filter and a proposed construction entrance that can logically only serve the demolition phase of the project given it is shown in a location within the proposed building footprint and in an area of deeper excavation needed to construct the basement level. In our opinion the proposed measures shown will not be sufficient to prevent sediment from leaving the site. We recommend the Board request the applicant to describe how it plans to execute construction and how proposed erosion control measures will be modified to serve each phase of construction. For example, we see no way the Project can be constructed using exclusively the entrance shown on the plans and

that a rear entrance is likely required. We expect the rear of the site will be the most heavily used during construction given the lack of any available space between the building, the abutting properties, and the street yet no accommodations are shown at the rear of the site to manage construction traffic, soil stockpiles or construction parking/laydown. Without careful planning of construction activity and robust erosion and sedimentation controls there is a significant potential for impact to Mill Brook.

2023-02-17 Update – No response provided however revised plans include the bulk of information requested. **Comment Resolved**

## February 17, 2023 Comments

78. We understand plans are currently being revised to further address comments and input received during the public hearings. To the extent possible all drawings should be coordinated so as not to include conflicting information.

79. We recommend future plan revisions not include “revision clouds” as those plans may be referenced in a decision and clouds compromise plan readability and content. Clouding changes is not necessary for our review. Please be advised revised submittals should still be noted in the revision box in the title block.

We appreciate the effort by the applicant and their design team to address our comments and look forward to seeing revised plans and supplemental information on use of the public way. If you have any questions or comments, please feel free to contact me at (508) 786-2230.

Very truly yours,



Sean P. Reardon, P.E.  
Vice President

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## **1021/1025 Massachusetts Avenue**

### **Project Sustainability**

**February 22, 2023**

The project will be designed to include the following sustainability related features:

#### **LOCATION and TRANSPORTATION**

- Project located in area with public transportation via bus lines serving the commuter rail at Porter Square and the red line at Harvard Station. There is a bus stop at the site and one across street.
- Project located within ½ mile walk to a full array of community resources, such as banking, dining and shopping.
- Site is currently developed and has been significantly degraded over the years.
- 5 story building height allows for greater density within building footprints
- Bicycle facilities are provided inside the building for residents, with exterior bike racks provided for visitors.
- Parking space counts have been reduced to the extent possible with all of the parking located within the building, limiting pervious area and heat island effect.
- Eleven EV charging stations will be provided, with provision for future EV stations by way of conduit provided within the parking garage

#### **SUSTAINABLE SITES**

- Project has a construction activity pollution prevention plan where an erosion and sedimentation plan will be followed (SWPPP)
- Significant amounts of contiguous open space are provided by way of the planted area at the north end of the site
- Stormwater runoff will be managed per state regulations/best practices as opposed to the existing condition with offsite untreated flows
- Complete new landscape plan featuring native/non-invasive/drought tolerant species is proposed including 54 deciduous trees, 60 tree seedlings, and 11 evergreen trees
- The planted areas will provide Improved habitat for birds and small animals
- The outdoor plaza at the second level will provide additional outdoor living area
- Green roof at the plaza area will reduce the heat island effect

### **Harrison Mulhern Architects**

- White roofing (solar reflective index equal to or great than 82) at flat roof sections, combined with in-building parking will serve to reduce heat island effect
- All exterior lighting will be dark sky compliant and designed not to spill over onto adjacent sites

### **WATER EFFICIENCY**

- Drought tolerant and native shrub and tree species will be watered by hand until established.
- Lawn areas planted with a native grass mix will receive a nominal amount of irrigation.
- Indoor water use will be limited to extent possible through use of low flow toilets and plumbing fixtures which will be WaterSense labeled
- Residents domestic hot water use will be individually metered, supporting water efficiency efforts by monitoring and benchmarking water usage over time

### **ENERGY and ATMOSPHERE**

- Building design will meet the revised Massachusetts Stretch Energy Code (225CMR 23.00) requirements, with minimum R value as follows:

Roof: R-49

Walls: R-23.8 (5 + 19)

Foundation Perimeter below grade: R-10

Foundation Perimeter above grade: R-13.3

Slabs: R-10

- Building will have a continuous exterior insulation application
- Building will be designed to have a continuous air barrier and to limit thermal bridging
- Building roof areas will be structured to be solar-ready with conduit provided from an enlarged electrical room designed to accommodate solar equipment
- Motion sensor lighting will be installed in common hallways and stairways
- Units and common spaces will be heated and cooled by a high efficiency heat pump systems
- Units will have individual control and metering and be designed to be compartmentalized
- Unit appliances will be energy star rated
- Units design will be evaluated by a HERS rater, including blower door testing
- Units will be energy usage commissioned prior to occupancy (ASHRAE Standard 90.1-2010)

### **MATERIALS and RESOURCES**

- Construction waste will be sorted to maximize level of recycling

### **Harrison Mulhern Architects**

- Construction materials to be sourced locally to the extent possible
- Tile backer board to be non-paper faced

### **INDOOR ENVIRONMENTAL QUALITY**

- No smoking will be allowed on site or in the building common areas
- All materials used will be no or low VOC emittance with a limited use of carpet
- Units and common areas to be served with energy recovery ventilation
- Project will employ continuously operating exhaust fans at bathrooms to minimize potential moisture problems
- All clothes dryers will be exhausted directly to the exterior
- Interior lighting to be low energy LED type
- All units will have a carbon monoxide detectors
- Window will be sized take advantage of daylight
- Unit wall and floor assembly separations will be acoustically engineered for privacy

END